

REMARKS

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims as amended.

Claims 1-18 are pending in the application. Claims 1-10, 12, 14, and 16-18 are rejected. Claims 11, 13, and 15 are objected to. Claims 1, 4, 5, 9, 12, and 17 are amended herein for reasons of clarity and not for reasons of patentability, as will be apparent.

The Rejections under 35 U.S.C. §103(a)

The Examiner rejects Claims 1-10, 12, 14, and 16-18 under 35 U.S.C. §103(a) as being unpatentable over Pollalis et al. (U.S. Patent number 5,016, 170) in view of Koskela (article entitled "Management of Production in Construction: A Theoretical View"). The Examiner recognizes that Pollalis et al. fails to teach the claimed reliability buffer. The Examiner relies upon Koskela as teaching "reliability buffering." The Examiner concludes that "[a]t the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Pollalis by way of Koskela since Koskela teaches methods in avoiding excessive buffers; avoiding low cost production; avoiding work in suboptimal conditions; and avoiding the cascade of pointwise deviation to other tasks... ."

According to the Federal Register, Volume 72, No. 195, dated October 10, 2007, at page 57528, Part III of the section entitled "Examination Guidelines for Determining Obviousness under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*," in order to establish a prima facie case of obviousness "...the prior art reference (or prior art references when combined) need not teach or suggest all the claim limitations." However, as also stated in Part III, in order to establish prima facie obviousness, "[t]he gap between the prior art and the claimed invention may not be 'so great as to render the [claim] nonobvious to one

reasonably skilled in the art.” Applicants respectfully submit that the Examiner has not met this burden in order to establish prima facie obviousness.

Applicants submit that independent Claim 1 is patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... generating a reliability buffer duration value; adding the reliability buffer duration value to the project plan data; and placing a reliability buffer having a time duration determined in accordance with the reliability buffer duration value in front of and associated with a downstream activity," as set forth in Claim 1. Applicants submit that such omission represents a gap between the prior art and the claimed invention that is so great as to render the claim nonobvious to one reasonably skilled in the art.

With this particular arrangement, the present invention provides a reliability buffer, for example, the reliability buffers 244a-244c of FIG. 7. Reliability buffers are described throughout the written specification, and are also contrasted with conventional contingency buffers. For example, with regard to FIG. 2, at page 11, lines 6-22, (amended in Response Filed October 3, 2006), it is stated:

Activity A and activity B each have an FS relationship 58, 60a with activity C. A reliability buffer time bar 62 is disposed on a first region of the activity time bar 56. Thus, rather than utilizing the prior art approach of providing contingency buffers appended to the ends of time bars 52, 54a associated with activities A and B, in accordance with the present invention, the reliability buffer 62 is associated with activity C. In the example of FIG. 2, the reliability buffer 62 is placed at the beginning of time bar 56 associated with activity C.

The reliability buffer 62 is applied at the merging point 57 between upstream activities A and B and downstream activity C. **The reliability buffer 64 is associated with the beginning of activity C, unlike the contingency buffers 22, 24 of FIG. 1 that are associated with the end of activities A, B.** It should be appreciated that although the reliability buffer 64 is here shown to be part of activity C, it can also be considered separately from activity C. In some project plan charts below, the reliability buffer is shown separately from the downstream activity with which it is most closely associated. When shown

separately, it has a “buffer time precedence relationship” that is FS with the downstream activity. It should be understood, however, that other buffer time precedence relationships between the reliability buffer 62 and the downstream activity are also possible. [emphasis added]

Thus, the reliability buffer is clearly defined to be associated with a downstream activity, unlike a conventional contingency buffer, which is a time buffer applied to the end of an upstream activity to account for an inability to finish the upstream activity at the scheduled time.

As the Examiner is aware, Applicants can act as their own lexicographers defining terms as they see fit, and are able to use the term “reliability buffer.” As stated in the MPEP 706.03d:

*¶ 7.34.02 Terminology Used Inconsistent with Accepted Meaning*

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “[1]” in claim [2] is used by the claim to mean “[3]”, while the accepted meaning is “[4].” The term is indefinite because the specification does not clearly redefine the term.

Applicantst submit that there term “reliability buffer” has no conventional meaning. Furthermore, Applicants submit that the term is clearly described throughout the written description.

The Examiner uses Koskela to teach “reliability buffering.” As indicated by the Examiner, “...the Office interprets ‘reliability’ as inherent in terms of the context of this construction project planning model... .”

As an initial matter, Applicants do not claim “reliability buffering,” but instead claim a “reliability buffer,” which is clearly described tangible element “associated with a downstream activity” as claimed, not a general buffering to achieve project reliability.

Furthermore, according to the Manual of Patent Examining Procedure (MPEP) §2112, the fact that a certain characteristic *may* be present in the prior art is not sufficient to establish inherency. Therefore, Applicants respectfully submit that, because Koskela merely describes certain aspect of a project plan with regard to a “cost of variability” (see, e.g., page 250) and does not described the claimed “reliability buffer,” the Examiner has not met the required burden of proof for inherency.

Applicants submit that the gap between the prior art and the claimed invention is so great as to render Claim 1 nonobvious to one reasonably skilled in the art.

In view of the above, Applicants submit that Claim 1 is patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela.

Claims 2-3 depend from and thus include the limitations of Claim 1. Thus, Applicants submit that Claims 2-3 are patentably distinct over the cited references at least for the reasons discussed above in conjunction with Claim 1.

For substantially the same reasons discussed above in conjunction with Claim 1, Applicants submit that independent Claim 4 is patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest “... placing a reliability buffer in a buffer time precedence relationship with the downstream activity to provide a buffered downstream activity,” as set forth in Claim 4. With regard to Claim 4, the Examiner asserts that Pollalis et al. teaches “one upstream activity.” Applicants do not understand this assertion and submit that Pollalis et al. fails to describe or suggest the claimed reliability buffer.

Claims 5-10, 12, 14, and 16 depend from and thus include the limitations of Claim 1. Thus, Applicants submit that Claims 5-10, 12, 14, and 16 are patentably distinct over the cited references at least for the reasons discussed above in conjunction with Claim 4.

The Examiner offers no comment with regard to rejected Claims 5, 6, 8, 10, or 16. Thus, Applicants submit that the Examiner's Office Action is not proper under 37 C.F.R. 1.104(c)(2), which states in part:

"...[w]hen a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied upon must be designated as nearly as practicable. ..."

Without having knowledge of where the Examiner finds the subject matter of the dependent claims within the cited references, Applicants are unable to comment with specificity about the subject matter of dependent claims 5, 6, 8, 10, or 16 in a way that might address the Examiner's concerns. Nevertheless, Applicants attempt below to provide fully responsive comments.

In view of the above, Applicants respectfully request that the next Office Action, should one be necessary, be identified as a non-final Office Action.

Applicants submit that Claim 5 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... adding a downstream sensitivity value to the project plan data," as set forth in Claim 5. The sensitivity value is described, for example, beginning at page 13, line 22.

Applicants submit that Claim 6 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... adding an activity reliability value to the project plan data," as set forth in Claim 6. The reliability value is described, for example, beginning at page 14, line 16.

Applicants submit that Claim 7 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... adding an activity production rate value to the project plan data," as set forth in Claim 7. The Examiner asserts that a production rate is described by Pollalis et al. at column 1, lines 33-36. However, Applicants submit that Pollalis describes a "projected production rate" and not "adding a production rate value to the project plan data as claimed." In essence, the claimed adding the production rate value describes an input of the production rate value. In contrast, Applicants submit that the "projected production rate value" described by Pollalis et al. is a data output.

Applicants submit that Claim 8 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... the buffer time precedence relationship is finish to start," as set forth in Claim 8. Applicants respectfully direct the Examiner's attention to FIG. 1, in which a conventional contingency buffer, which is not a reliability buffer, has a start to finish relationship with an upstream activity, not the claimed finish to start relationship evident in FIG. 7.

Applicants submit that Claim 9 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... generating a reliability buffer duration value associated with the reliability buffer; generating an activity time precedence relationship between the buffered downstream activity and the at least one upstream activity; and adding the reliability buffer duration value and the activity time precedence relationship to the project plan data to provide an initial reliability buffer project plan," as set forth in Claim 9. With regard to Claim 9, the Examiner asserts that Pollalis teaches "one upstream activity." Applicants do not understand this assertion and submit that Pollalis et al. fails to describe or suggest the claimed reliability buffer or the claimed reliability buffer duration value or the claimed initial reliability buffer project plan.

For substantially the same reasons discussed above in conjunction with Claim 1, Applicants submit that Claim 12 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "...selecting a plurality of reliability buffer duration values; and for each of the plurality of reliability buffer duration values, generating a simulated project schedule and a simulated project cost; and analyzing the simulated project schedules and the simulated project costs associated with the plurality of reliability buffer duration values; and selecting the reliability buffer duration value and the associated project schedule corresponding to a smallest simulated project schedule or associated with a smallest simulated project cost," as set forth in Claim 12.

Applicants submit that Claim 14 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... adding policy data to the project plan data," as set forth in Claim 14. The Examiner asserts that Pollalis shows "simulated project schedules ...and ...simulated project costs" in FIGS. 8 and 9. However, Applicants submit that simulated project schedules and simulated project costs are not policy data. Exemplary policy data is described, for example, at page 18, lines 24-28, where it is stated "[p]olicy data 112 can also be provided to include project policies such as manpower availability versus time values, overtime and flexibility of worker headcount control values, a buffering policy, thoroughness of quality control values, hiring time control values, and request for information (RFI) time control values." None of these elements are described by Pollalis et al. It is also described at page 8, lines 23-25 that "[t]he term 'policy data' will be used to describe project plan data elements that corresponds to one or more activities that can be related or unrelated. For example, a policy of the use of overtime labor can globally correspond to groups of unrelated activities."

For substantially the same reasons discussed above in conjunction with Claim 1, Applicants submit that Claim 16 is further patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "...

updating the project plan data to provide an updated reliability buffer project plan," as set forth in Claim 16.

For substantially the same reasons discussed above in conjunction with Claim 1, Applicants submit that independent Claim 17 is patentably distinct over Pollalis et al., whether taken alone or in combination with Koskela, since the cited references neither describe nor suggest "... a project data processor to provide project plan data; and a reliability buffer processor adapted to receive the project plan data and to generate a project plan with reliability buffers, each one of the reliability buffers associated with a respective downstream activity," as set forth in Claim 17.

Claim 18 depends from and thus includes the limitations of Claim 17. Thus, Applicants submit that Claim 18 is patentably distinct over the cited references at least for the reasons discussed above in conjunction with Claim 17.

#### The Claim Objections

The Examiner objects to Claims 11, 13, and 15 as being dependent upon a rejected base claim, but indicates that Claims 11, 13, and 15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

For the above reasons, Applicants submit that independent Claim 4, from which Claims 11, 13, and 15 depend, is patentably distinct over the cited references. Therefore, Applicants submit that Claims 11, 13, and 15 are allowable in their present dependent form.

In view of the above Remarks, Applicants submit that Claims 1-18 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

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Respectfully submitted,

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